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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,816	06/26/2003	Sundararajan Sriram	TI-28564A	5491
23494 7590 01/02/2008 TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			EXAMINER CASCA, FRED A	
			ART UNIT 2617	PAPER NUMBER
			NOTIFICATION DATE 01/02/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com
uspto@dlemail.itg.ti.com

Office Action Summary

Application No.

10/606,816

Applicant(s)

SRIRAM, SUNDARARAJAN

Examiner

Fred A. Casca

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment filed on October 13, 2007. Applicant's arguments with respect to rejection of claims 1-5 and 13-17 are persuasive. Thus the rejection of claims 1-5 and 13-17 under 35 USC § 103 over Admitted Prior Art in view of Wong et al (Patent No. 6,233,466) is withdrawn. However, claims 1-5 and 13-17 are rejected in view of new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 1-5 and 13-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Independent claims 1 and 13 recites the limitation "over respective adjacent channels". There is insufficient explanation of how to make and use the respective adjacent channels to transmit synchronization codes during a first symbol time. It is not clear whether the synchronization codes for a particular channel is transmitted by an adjacent channel or synchronization codes are transmitted for each channel by that same

Art Unit: 2617

channel. Without additional guidance, there would be undue experimentation as to how the synchronization codes are being transmitted.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1-5 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Applicant's Specification pages 1-5, particularly page 4, line 25 through page 5, line 8, hereinafter "Admitted Art") in view of Nystrom et al (US 6,185,244 B1).

Referring to claim 1, Admitted Art discloses a cell search method for wideband code division multiple access (WCDMA) communication system (Specification page 1 and figures Fig. 1-3C), comprising the steps of receiving a frame of data having a predetermined number of time slots, each time slot being adjacent to another time slot (Specification page 3); receiving a plurality of data symbols in each respective time slot (page 2 and 3); and receiving each of a primary, a secondary and a tertiary synchronization code over respective adjacent channels (page 4, line 24 through page 5, line 8, "The TSC is transmitted on a third perch channel at the same symbol time as the

Art Unit: 2617

FSC and SSC . . . The TSC, however, is transmitted only on eight even numbered time slots [0, 2, 4, . . . , 14] of each frame”).

Admitted Art does not specifically disclose and receiving synchronization code over respective adjacent channels **during a first symbol time in each of predetermined number of time slots.**

Nystrom discloses that receiving synchronization code (e.g., primary, secondary) **in each of predetermined number of time slots** (Figures 16-22, col. 12, line 8-67, and col. 13, lines 1-25, note that in each slot a primary synch code and a secondary synch code are transmitted. Further note that the concept of transmitting synch codes during a first symbol time is inherent in Nystrom because during any secure data transmission, synch codes should be the first set of data transmitted and as soon as possible, thus it is inherent that synch codes are transmitted during a first symbol time). An advantage of providing each synch code in each time slot during a first symbol time is better security because receiving synch codes during a second or later symbol time could be a little too late and may cause some problems.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Admitted Art by incorporating the teachings of Nystrom and consequently allowing all the three synchronization codes be transmitted during a first symbol time in each slot, as claimed, for the purpose of providing a securer communication system.

Referring to claim 2, the combinations of Admitted Art and Nystrom disclose a method as in claim 1, and further disclose the secondary and the tertiary synchronization codes identify a subset of codes (Admitted Art page 2 and figures 1-3C).

Referring to claim 3, the combinations of Admitted Art and Nystrom disclose a method as in claim 2, and inherently disclose the secondary and tertiary synchronization codes are formed from a predetermined order of synchronization code elements, the predetermined order corresponding to the subset of codes (pages 2-5).

Referring to claim 4, the combination of Admitted Art and Nystrom disclose every element of claim and inherently disclose the secondary and tertiary synchronization codes are formed from a predetermined order of common synchronization code elements (Admitted Art, pages 2-5).

Referring to claim 5, the combination of Admitted Art and Nystrom disclose all elements of claim 1, and inherently disclose a mobile receiver identifies a first time slot of the frame by the tertiary synchronization code (Admitted Art, pages 2-5, note that each timeslot including the first timeslot has a tertiary synch code, thus each first, second and other time slots are identified by the tertiary synch codes).

Referring to claims 13-17, claims 13-17 define a method reciting features analogous to the features of the methods claim 1-5 (as rejected above). Thus, the

Art Unit: 2617

combinations of Admitted Art and Nystrom disclose all elements of claims 13-17 (please see the rejection of claim 1-5 above).

Response to Arguments

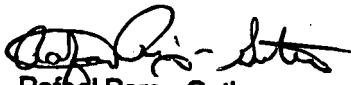
6. Applicant's arguments with respect to claims 1-5 and 13-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rafael Perez-Gutierrez
Supervisory Patent Examiner
Technology Center 2600
Art Unit 2617
12/26/07